

## Claims

1. A wireless terminal including a substrate having a ground plane (12) thereon, RF components mounted on the substrate and a PIFA (Planar Inverted-F Antenna)(16) having connections electrically coupled to the ground plane, and the RF components characterised in that a notch antenna (14) is provided in the substrate for receiving signals and in that de-activating means (SW1, SW2,36) are provided for de-activating the notch antenna when the PIFA (16) is being used for transmitting signals.

10

2. A wireless terminal as claimed in claim 1, characterised in that the PIFA is a dual band slotted planar patch antenna.

3. A wireless terminal as claimed in claim 1 or 2, characterised in that the de-activating means is responsive to activation of the notch antenna to de-activate the PIFA.

4. A wireless terminal as claimed in claim 1, 2 or 3, characterised in that the de-activating means comprises means for de-tuning the notch antenna.

5. A wireless terminal as claimed in claim 1,2 or 3, characterised in that capacitance means are connected across the notch for tuning the notch antenna and in that the means for de-activating the notch antenna comprises means for shorting the capacitance means.

6. A wireless terminal as claimed in claim 5, characterised in that the de-activating means comprises a passive network (46) presenting an open circuit at the operating frequency of the patch antenna and a short circuit at the operating frequency of the PIFA.

7. A wireless terminal as claimed in any one of claims 1 to 6, characterised in that the de-activating means has a diversity operating mode in which both the PIFA and the notch antenna are active in a receive mode and in that means are provided for summing output signals from the PIFA and the  
5 notch antenna.

8. A wireless terminal as claimed in any one of claims 1 to 5, characterised by means (54) for measuring the contemporaneous quality of signals received by the PIFA and the notch antenna and for selecting for  
10 receiving signals that one of the PIFA and notch antenna receiving the better quality signals.

9. A wireless module comprising a substrate (12) having RF components mounted thereon and means for connection to a PIFA (Planar  
15 Inverted-F Antenna)(16), characterised in that a notch antenna (14) is provided in the substrate and in that de-activating means (SW1, SW2) are provided for de-activating the notch antenna.

10. A wireless module as claimed in claim 9, characterised in that  
20 capacitance means are connected across the notch for tuning the notch antenna and in that the means for de-activating the notch antenna comprises means for shorting the capacitance means.